Lenovo A540/A740Hardware Maintenance Manual

Machine Types: F0AN [A540];F0AM [A740]

lenovo

Lenovo A540/A740
Hardware Maintenance Manual

Machine Types: F0AN [A540];F0AM [A740]

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Chapter 1. About this manual

This manual contains service and reference information for Lenovo A540/A740 computers listed on the cover. It is intended only for trained servicers who are familiar with Lenovo computer products.

Before servicing a Lenovo product, be sure to read the Safety Information.

The description of the TV-tuner card in this manual applies only to computers with a TV-tuner card installed. It does not apply to computers without a TV-tuner card.

Important Safety Information

Be sure to read all CAUTION and DANGER sections in this manual before following any of the instructions.

Veuillez lire toutes les consignes de type DANGER et ATTENTION du présent document avant d'exécuter les instructions.

Lesen Sie unbedingt alle Hinweise vom Typ "ACHTUNG" oder "VORSICHT" in dieser Dokumentation, bevor Sie irgendwelche Vorgänge durchführen

Leggere le istruzioni introdotte da ATTENZIONE e PERICOLO presenti nel manuale prima di eseguire una qualsiasi delle istruzioni

Certifique-se de ler todas as instruções de cuidado e perigo neste manual antes de executar qualquer uma das instruções

Es importante que lea todas las declaraciones de precaución y de peligro de este manual antes de seguir las instrucciones.

执行任何说明之前，请确保已阅读本书中的所有警告和危险声明。

執行任何指示前，請確實閱讀本書中的所有警告及危險聲明。

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Chapter 2. Safety information

This chapter contains the safety information that you need to be familiar with before servicing a computer.

General safety

Follow these rules to ensure general safety:

- Keep the areas around the computer clear and clean during and after maintenance.
- When lifting any heavy object:
  1. Ensure you can stand safely without slipping.
  2. Distribute the weight of the object equally across both feet.
  3. Lift slowly. Never move suddenly or twist when you attempt to lift.
  4. Lift by standing or by pushing up with your leg muscles; this action removes the strain from the muscles in your back.
     Do not attempt to lift any objects that weigh more than 16 kg (35 lb) or objects that you think are too heavy for you.
- Do not perform any action that would create a hazard for the customer, or would make the computer unsafe.
- Before you start the computer, ensure that other service representatives and customer personnel are not in a position that would create a hazard for them.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the computer.
- Keep your tool case away from areas that people may walk through to ensure no-one trips over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Ensure that your sleeves are fastened or rolled up above your elbows. If your hair is long, tie or fasten it back.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, approximately 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.
  Remember: Metal objects are good electrical conductors.
- Wear safety glasses when you are: hammering, drilling soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reattach all covers correctly before returning the computer to the customer.

Electrical safety

CAUTION:
Electrical current from power, telephone, and communication cables can be hazardous. To avoid personal injury or equipment damage, disconnect any attached power cords, telecommunication cables, network cables, and modem cables before you open the computer covers, unless instructed otherwise in the installation and configuration procedures.

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Observe the following rules when working on electrical equipment.

Important: Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents. Many customers have rubber floor mats near their equipment that contain small conductive fibers to decrease electrostatic discharge.

- Find the room emergency power-off (EPO) switch, disconnecting switch, or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing Field Replaceable Units (FRUs)
- Before you start to work on the computer, unplug the power cord. If you cannot unplug it, ask the customer to power-off the electrical outlet that supplies power to the machine and to lock the electrical outlet in the off position.
- If you need to work on a computer that has exposed electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.
    Remember: Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.
    Remember: There must be a complete circuit to cause electrical shock. By observing the above rule, you may prevent a current from passing through your body.
  - When using a tester, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

  Observe the special safety precautions when you work with very high voltages; these instructions are in the safety sections of the maintenance information. Use extreme care when measuring high voltages.
- Regularly inspect and maintain your electrical hand tools to ensure they are safe to use.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are wet floors, non-grounded power extension cables, conditions that may cause or allow power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. This surface is conductive, and touching a live circuit can cause personal injury and damage to the computer.
- Do not service the following parts with the power on when they are removed from their normal operating positions in a computer:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators

  and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Use caution; do not become a victim yourself.

– Switch off power.
– Send another person to get medical aid.

Safety inspection guide

The intent of this inspection guide is to assist you in identifying potential hazards posed by these products. Each computer, as it was designed and built, had required safety items installed to protect users and service personnel from injury. This guide addresses only those items. However, good judgment should be used to identify potential safety hazards due to attachment of features or options not covered by this inspection guide.

If any hazards are present, you must determine how serious the apparent hazard could be and whether you can continue without first resolving the problem.

Consider the following items and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock).
- Explosive hazards, such as a damaged CRT face or bulging capacitor
- Mechanical hazards, such as loose or missing hardware

The guide consists of a series of steps presented as a checklist. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Power-off the computer. Disconnect the power cord.
3. Check the power cord for:
   a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and frame ground.
   b. The power cord should be the appropriate type as specified in the parts listings.
   c. Insulation must not be frayed or worn.
4. Remove the cover.
5. Check for any obvious alterations. Use good judgment as to the safety of any alterations.
6. Check inside the unit for any obvious hazards, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
7. Check for worn, frayed, or pinched cables.
8. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling electrostatic discharge-sensitive devices

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the computer, the part, the work mat, and the person handling the part are all at the same charge.

Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people while handling the part.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

  Note: The use of a grounding system is desirable but not required to protect against ESD damage.

  – Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
  – Use an ESD common ground or reference point when working on a double-insulated or battery-operated system. You can use coax or connector-outside shells on these systems.
  – Use the round ground-prong of the AC plug on AC-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Safety notices

The CAUTION and DANGER safety notices in this section are provided in the the language of English.

DANGER

Electrical current from power, telephone and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded electrical outlet.**
- **Connect any equipment that will be attached to this product to a properly wired outlet.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached power cords, telecommunications cables, network cables, and modem cables before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.**

To Connect	To Disconnect
1. Turn everything OFF. 2. First, attach all cables to devices. 3. Attach signal cables to connectors. 4. Attach power cords to outlet. 5. Turn device ON.	1. Turn everything OFF. 2. First, remove power cords from outlets. 3. Remove signal cables from connectors. 4. Remove all cables from devices.

CAUTION:
When replacing the lithium battery, use only Part Number 45C1566 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.
Do not:

- **Throw into or immerse in water**
- **Heat to more than 100°C (212°F)**
- **Repair or disassemble**

Dispose of the battery as required by local ordinances or regulations.

CAUTION:
When laser products (such as CD-ROMs, DVD-ROM drives, fiber optic devices, or transmitters) are installed, note the following:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following:

These diodes emit radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

≥18 kg (37 lbs)	**≥32 kg (70.5 lbs)**	**≥55 kg (121.2 lbs)**

CAUTION:
Use safe practices when lifting.

CAUTION:
The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.

CAUTION:
Do not place any object weighing more than 82 kg (180 lbs.) on top of rack-mounted devices.

Chapter 3. General information

This chapter provides general information that applies to all computer models covered by this manual.

Specifications

This section lists the physical specifications for your computer.

This section lists the physical specifications for your computer.

Type Lenovo A540/A740

This section lists the physical specifications.

Environment

Air temperature:

- Operating: 10° to 35°C
- Transit: -20° to 55°C

Humidity:

- Operating: 35% to 80%
- Transit: 20% to 90% (40°C)
- Altitude: 86KPa to 106KPa

Electrical input:

- Input voltage: 90V-264V(AC)
- Input frequency: 47Hz-63Hz

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Chapter 4. General Checkout

Attention: The drives in the computer you are servicing might have been rearranged or the drive startup sequence may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. Data or programs can be overwritten if you select an incorrect drive.

General error messages appear if a problem or conflict is found by an application, the operating system, or both. For an explanation of these messages, refer to the information supplied with that software package.

Use the following procedure to help determine the cause of the problem:

1. Power-off the computer and all external devices.
2. Check all cables and power cords.
3. Set all display controls to the middle position.
4. Power-on all external devices.
5. Power-on the computer.
   - Look for displayed error codes.
   - Look for readable instructions or a main menu on the display.

   If you did not receive the correct response, proceed to step 6.

   If you did receive the correct response, proceed to step 7.
6. If one of the following happens, follow the instruction given:
   - If the computer displays a POST error, go to “POST error codes”.
   - If the computer hangs and no error is displayed, continue at step 7.
7. If the test stops and you cannot continue, replace the last device tested.

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Chapter 5. Using the Setup Utility

The Setup Utility program is used to view and change the configuration settings of your computer, regardless of which operating system you are using. However, the operating system settings might override any similar settings in the Setup Utility program.

Starting the Lenovo BIOS Setup Utility program

To start the Lenovo BIOS Setup Utility program, do the following:

1. If your computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. Press and hold the **F1** key then turn on the computer. When the Lenovo BIOS Setup Utility program is displayed, release the **F1** key.

Note: If a Power-On Password or an Administrator Password has been set, the Setup Utility program menu will not be displayed until you type your password. For more information, see “Using passwords.”

Viewing and changing settings

System configuration options are listed in the Lenovo BIOS Setup Utility program menu. To view or change settings, see “Starting the Setup Utility program.”

You must use the keyboard when using the Lenovo BIOS Setup Utility menu. The keys used to perform various tasks are displayed on the bottom of each screen.

Using passwords

You can use the Lenovo BIOS Setup Utility program to set passwords to prevent unauthorized persons from gaining access to your computer and data. See “Starting the Setup Utility program.” The following types of passwords are available:

- Administrator Password
- Power-On Password

You do not have to set any passwords to use your computer. However, if you decide to set passwords, read the following sections.

Password considerations

A password can be any combination of letters and numbers up to 16 characters (a-z and 0-9). For security reasons, it is a good idea to use a strong password that cannot be easily compromised. We suggest that passwords should follow these rules:

- For a strong password, use 7-16 characters and a mix of letters and numbers.
- Do not use your name or your user name.
- Do not use a common word or a common name.
- Use something significantly different from your previous password.

Attention: Administrator and Power-On passwords are not case sensitive.

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Administrator Password

Setting an Administrator Password deters unauthorized persons from changing configuration settings. You might want to set an Administrator Password if you are responsible for maintaining the settings of several computers.

After you set an Administrator Password, a password prompt is displayed every time you access the Lenovo BIOS Setup Utility program.

If both the Administrator and Power-On Password are set, you can type either password. However, you must use your Administrator Password to change any configuration settings.

Setting, changing, or deleting an Administrator password

To set an Administrator Password, do the following:

Note: A password can be any combination of letters and numbers up to 16 characters (a-z and 0-9). For more information, see “Password considerations” on page 13.

1. Start the Lenovo BIOS Setup Utility program (see “Starting the Lenovo BIOS Setup Utility program” on page 13).
2. From the **Security** menu, select **Set Administrator Password** and press the **Enter** key.
3. The password dialog box will be displayed. Type the password then press the **Enter** key.
4. Re-type the password to confirm, then press the **Enter** key. If you typed the password correctly, the password will be installed.

To change an Administrator Password, do the following:

1. Start the Lenovo BIOS Setup Utility program (see “Starting the Lenovo BIOS Setup Utility program” on page 13).
2. From the **Security** menu, select **Set Administrator Password** and press the **Enter** key.
3. The password dialog box will be displayed. Type the current password then press the **Enter** key.
4. Type the new password, then press the **Enter** key. Re-type the password to confirm the new password. If you typed the new password correctly, the new password will be installed. A Setup Noticed confirming that changes have been saved will be displayed.

To delete a previously set Administrator Password, do the following :

1. From the **Security** menu, select **Set Administrator Password** and press the **Enter** key.
2. The password dialog box will be displayed. Type the current password and press the **Enter** key.
3. To delete an **Administrator Password**, leave each new password line item blank, then press the **Enter** key. A Setup Notice confirming that changes have been saved will be displayed.
4. Return to the Lenovo BIOS Setup Utility program menu and select the **Exit** option.
5. Select **Save changes and Exit** from the menu.

Power-On Password

When a Power-On Password is set, you cannot start the Lenovo BIOS Setup Utility program until a valid password is typed from the keyboard.

Setting, changing, or deleting a Power-On Password

Note: A password can be any combination of letters and numbers up to 16 characters (a-z and 0-9).

To set a Power-On Password, do the following:

1. Start the Lenovo BIOS Setup Utility program (See ”Starting the Lenovo BIOS Setup Utility program” on page 13.)
2. From the **Security** menu, select **Set Power-On Password** and press the **Enter** key.
3. The password dialog box will be displayed. Type the password, then press the **Enter** key.
4. Re-type the password to confirm. If you typed the password correctly, the password will be installed.

To change a Power-On Password, do the following:

1. Start the Lenovo BIOS Setup Utility program (See ”Starting the Lenovo BIOS Setup Utility program” on page 13.)
2. From the **Security** menu, select **Set Power-On Password** and press the **Enter** key.
3. The password dialog box will be displayed. Type the current password then press the **Enter** key.
4. Type the new password, then press the **Enter** key. Re-type the password to confirm the new password. If you typed the new password correctly, the new password will be installed. A Setup Noticed confirming that changes have been saved will be displayed.

To delete a previously set Power-On Password, do the following :

1. From the **Security** menu, select **Set Power-On Password** and press the **Enter** key.
2. The password dialog box will be displayed. Type the current password and press the **Enter** key.
3. To delete the **Power-On Password**, leave each new password line item blank, then press Enter. A Setup Notice confirming that changes have been saved will be displayed.
4. Return to the Lenovo BIOS Setup Utility program menu and select the **Exit** option.
5. Select **Save changes and Exit** from the menu.

Enabling or disabling a device

The **Devices** options is used to enable or disable user access to the following devices:	
USB Functions	Select whether to enable or disable **USB** (Universal Serial Bus) functions. If the functions are disabled, no **USB** devices can be used.
SATA Mode	When this feature is set to **Disabled**, all devices connected to the SATA connectors (e.g. hard disk drives or the optical disk drive) are disabled and cannot be accessed.
Onboard Audio Controller	Select whether to enable or disable the **Onboard Audio Controller**. When this feature is set to **Disabled** all devices connected to the audio connectors (e.g. headphones or a microphone) are disabled and cannot be used.
Onboard Ethernet Controller or LAN Boot Agent	Select whether to enable or disable the **Onboard Ethernet Controller**, or select whether to enable or disable load onboard **PXE** (**Preboot Execution Environment**).

To enable or disable a device, do the following:

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 13).
2. From the Setup Utility program menu, select **Devices**.
3. Select an option as follows:

   Select **USB Setup**, press the **Enter** key, then select **USB Functions**.

Select **ATA Device Setup**, press the **Enter** key, then select **SATA Mode**.

Select **Audio Setup**, press the **Enter** key, then select **Onboard Audio Controller**.

Select **Network Setup**, press the **Enter** key, then select **Onboard Ethernet Support** or **LAN Boot Agent**.

4. Select **Disabled** or **Enabled** and press the **Enter** key.
5. Return to the Lenovo BIOS Setup Utility program menu and select the **Exit** option.
6. Select **Save changes and Exit** from the menu.

Notes:

a. If you do not want to save the settings, select **Discard changes and Exit** from the menu.

b. Select IDE/AHCI Mode: Device driver support is required for ACHI. Depending on how the hard disk image was installed, changing this setting may prevent the system from booting.

Selecting a startup device

If your computer does not boot from a device such as the CD/DVD-ROM drive disk or hard disk as expected, follow one of the procedures below.

Selecting a temporary startup device

Use this procedure to start up from any boot device.

Note: Not all CDs, DVDs or hard disk drives are bootable.

1. Turn off your computer.
2. Press and hold the **F12** key then turn on the computer. When the **Startup Device Menu** appears, release the **F12** key.

   Note: If the **Startup Device Menu** does not display using these steps, repeatedly press and release the **F12** key rather than keeping it pressed when turning on the computer.
3. Use ↑ and ↓ arrows to select the desired startup device from the **Startup Device Menu** and press the **Enter** key to begin.

   Note: Selecting a startup device from the **Startup Device Menu** does not permanently change the startup sequence.

Selecting or changing the startup device sequence

To view or permanently change the configured startup device sequence, do the following:

1. Start the Lenovo BIOS Setup Utility program (see “Starting the Lenovo BIOS Setup Utility program” on page 13).
2. From the Lenovo BIOS Setup Utility program main menu, select the **Startup** option.
3. Press the **Enter** key, and select the devices for the **Primary Boot Sequence**. Read the information displayed on the right side of the screen.
4. Use - and ¯ arrows to select a device. Use the **<+>** or **<->** keys to move a device up or down. Use the **<x>** key to exclude the device from or include the device in the boot sequence.
5. Return to the Lenovo BIOS Setup Utility program menu and select the **Exit** option.
6. Select **Save changes and Exit** from the menu.

Notes:

a. If you do not want to save the settings, select **Discard changes and Exit** from the menu.

b. If you have changed these settings and want to return to the default settings, select **Load Optimal Defaults** from the menu.

Exiting the Lenovo BIOS Setup Utility program

After you finish viewing or changing settings, press the **Esc** key to return to the Lenovo BIOS Setup Utility program main menu. You might have to press the **Esc** key several times. Do one of the following:

- If you want to save the new settings, select **Save changes and Exit** from the menu. When the **Save & reset** window shows, select the **Yes** button, and then press the **Enter** key to exit the Lenovo BIOS Setup Utility program.
- If you do not want to save the settings, select **Discard changes and Exit** from the menu. When the **Reset Without Saving** window shows, select the **Yes** button, and then press the **Enter** key to exit the Lenovo BIOS Setup Utility program.

Chapter 6. Symptom-to-FRU Index

The Symptom-to-FRU index lists error symptoms and possible causes. The most likely cause is listed first. Always begin with Chapter 4, “General Checkout,” on page 11. This index can also be used to help you decide which FRUs to have available when servicing a computer. If you are unable to correct the problem using this index, go to “Undetermined problems” on page 20.

Notes:

- If you have both an error message and an incorrect audio response, diagnose the error message first.
- If you cannot run the diagnostic tests or you get a diagnostic error code when running a test but did receive a POST error message, diagnose the POST error message first.
- If you did not receive any error message look for a description of your error symptoms in the first part of this index.

Hard disk drive boot error

A hard disk drive boot error can be caused by the following.

Error	FRU/Action
The startup drive is not included in the boot sequence configuration.	Check the configuration and ensure the startup drive is in the boot sequence.
No operating system is installed on the boot drive.	Install an operating system on the boot drive.
The boot sector on the startup drive is corrupted.	The drive must be formatted. Do the following: 1. Attempt to back up the data on the failing hard disk drive. 2. Use the operating system to format the hard disk drive.
The drive is defective.	Replace the hard disk drive.

Power Supply Problems

Follow these procedures if you suspect there is a power supply problem.

Check/Verify	FRU/Action
Check that the following are properly installed: • Power Cord • On/Off Switch connector • System Board Power Supply connectors • Microprocessor connections	Reseat connectors
Check the power cord.	Power Cord
Check the power-on switch.	Power-on Switch

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POST error codes

Each time you turn the computer on, it performs a series of tests to check that the system is operating correctly and that certain options are set. This series of tests is called the *Power-On Self-Test*, or *POST*. POST does the following:

- Checks some basic motherboard operations
- Checks that the memory is working correctly
- Starts video operations
- Verifies that the boot drive is working

POST Error Message	Description/Action
Keyboard error	Cannot initialize the keyboard. Make sure the keyboard is properly connected to the computer and that no keys are held pressed during POST. To purposely configure the computer without a keyboard, select **Keyboardless operation** in **Startup** and set the option to **Enabled**. The BIOS then ignores the missing keyboard during POST.
Reboot and Select proper Boot device or Insert Boot Media in selected Boot device	The BIOS was unable to find a suitable boot device. Make sure the boot drive is properly connected to the computer. Make sure you have bootable media in the boot device.

Undetermined problems

1. Power-off the computer.
2. Remove or disconnect the following components (if connected or installed) one at a time.
   a. External devices (modem, printer, or mouse)
   b. Extended video memory
   c. External Cache
   d. External Cache RAM
   e. Hard disk drive
   f. Disk drive
3. Power-on the computer to re-test the system.
4. Repeat steps 1 through 3 until you find the failing device or component.

If all devices and components have been removed and the problem continues, replace the system board.

Chapter 7. Replacing hardware

Attention: Do not remove the computer cover or attempt any repair before reading the “Important safety information” in the Safety and Warranty Guide that was included with your computer. To obtain copies of the Safety and Warranty Guide, go to the Support Web site at: http://consumersupport.lenovo.com.

Note: Use only parts provided by Lenovo.

General information

Pre-disassembly instructions

Before starting the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug all power and signal cables from the computer.
3. Place the system on a flat, stable surface.

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Replacing the keyboard and mouse

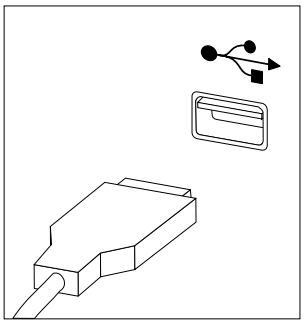
Attention: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the keyboard and mouse

Step 1. Remove any media (disks, CDs, DVDs or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.



Note: Your keyboard will be connected to a USB connector on one side or at the rear of the computer.

Step 4. Disconnect the defective keyboard cable from the computer and connect the new keyboard cable to the same connector.

Note: The mouse can be replaced using the same method.

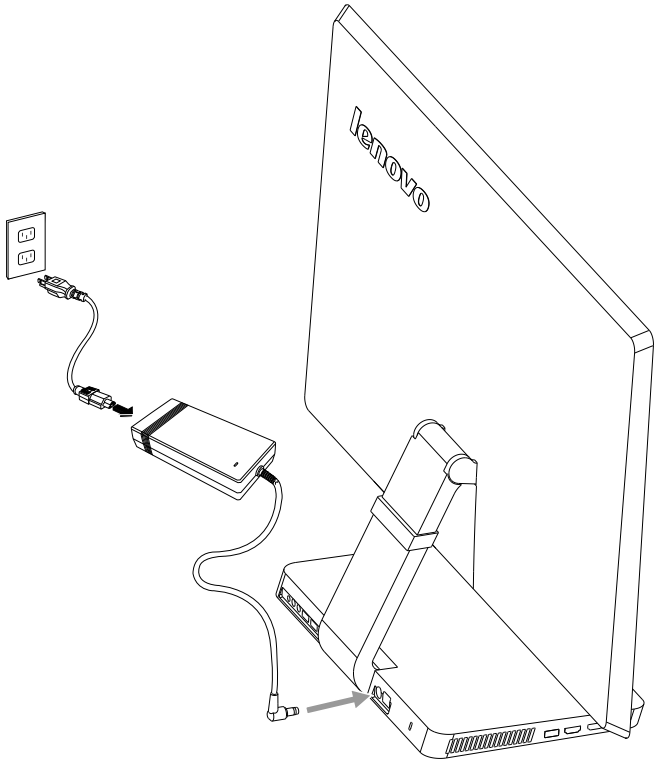
Replacing the power cord or power adapter

Attention: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the power cord and power adapter:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Locate the connector for the power cord. Refer to “Rear view”.



Step 3. Disconnect the failing power cord and adapter from the computer and connect the new power cord and adapter to the same connector.

Removing the base cover

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

Note: It may be helpful to place the computer face-down on a soft flat surface for this procedure. Lenovo recommends that you use a blanket, towel, or other soft cloth to protect the computer screen from scratches or other damage.

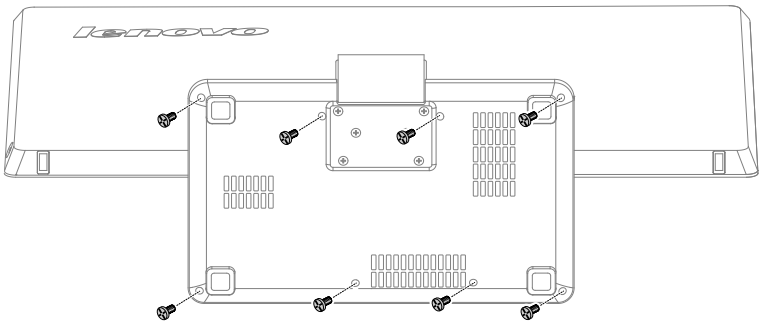
To remove the base cover

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

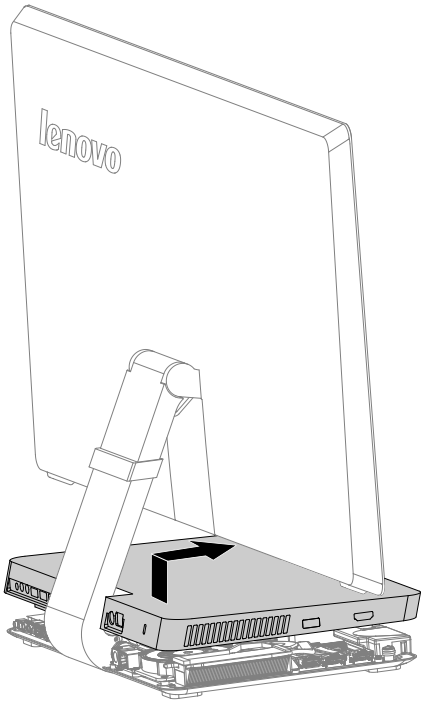
Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Place the computer face-down on a soft flat surface, then remove the 8 screws that secure the base cover to the base.



Step 5. Return the computer to an upright position, then lift the base cover up and slide it out as shown.



Step 6. To reattach the base cover:

a. Line up the base cover with the base, slide it back and snap it into position.

b. Place the computer face-down on a soft flat surface, then secure the base cover to the base with the 8 screws.

Replacing the hard disk drive

Attention: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the hard disk drive

Step 1. Remove any media (disks, CDs, DVDs or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

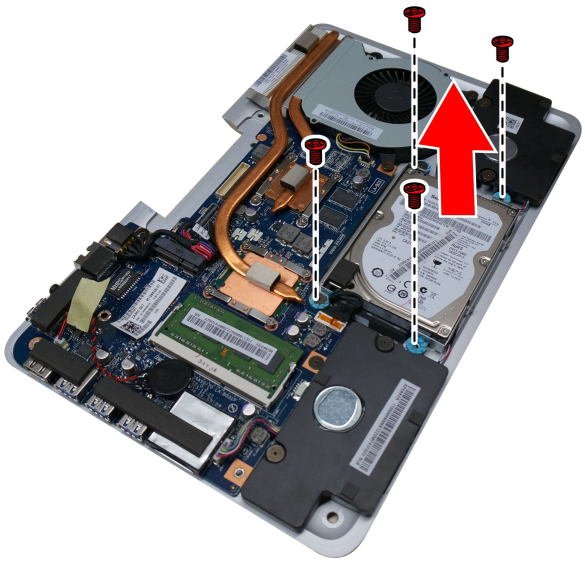
Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the 4 screws that secure the hard disk drive to the motherboard.

Step 6. Disconnect the data and power cable from the hard disk drive.



Step 7. Remove the 4 screws that secure the hard disk drive to the bracket, then separate the hard disk drive from the bracket.

Step 8. Install the new hard disk drive as follows:

a. Secure the new hard disk drive to the brackets with the 4 screws.

b. Connect the data and power cable to the new hard disk drive and motherboard.

c. Secure the new hard disk drive to chassis with the 2 screws.

Step 9. Reattach the base cover and secure it with the screws.

Replacing a memory module

Attention: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace a memory module

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Push out the latches on both sides of the memory socket to release the memory module. Gently pull the memory module upward to remove it from its socket.

Step 6. Align the new memory module with the memory socket, then insert it and push down on the top edge. Make sure the latches lock the memory module in place.

Step 7. Reattach the base cover and secure it with the screws.

Replacing the system fan

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the system fan

Step 1. Remove any media (disks, CDs, DVDs or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

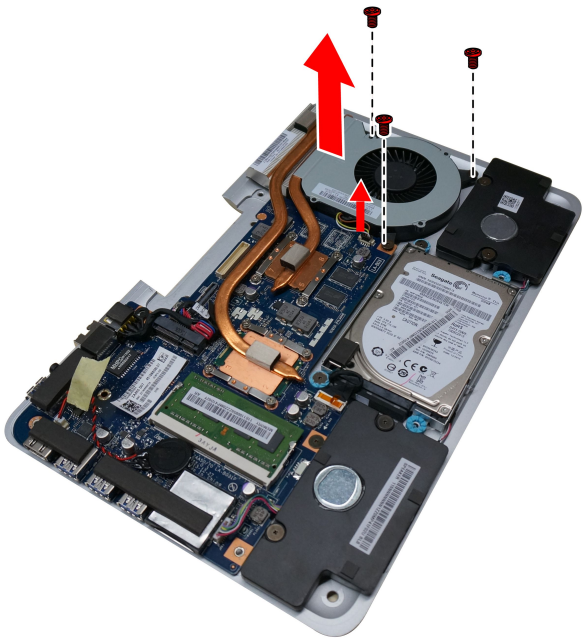
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the 3 screws that secure the system fan to the heat-sink.

Step 6. Disconnect the power cable from the motherboard.

Step 7. Lift the system fan up to remove it.



Step 8. Line up the new system fan, then secure it to the heat-sink and connect the new power cable to the motherboard.

Step 9. Reattach the base cover and secure it with the screws.

Replacing the heat-sink

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the heat-sink:

Step 1. Remove any media (disks, CDs, DVDs or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the system fan. Refer to “Replacing the system fan”.

Step 6. Remove the 8 screws that secure the heat-sink to the motherboard.

Step 7. Remove the heat-sink by lifting it up.

Attention: Place the heat-sink upside down on a flat surface to prevent thermal grease from contaminating other components.

Attention: Use an alcohol pad to wipe the thermal grease off the heat-sink and CPU.

Step 8. Use a thermal grease syringe to place 5 drops of grease on the top of the microprocessor. Each drop of grease should be 0.03ml (3 tick marks on the grease syringe).

Step 9. Line up the new heat-sink then secure it to the motherboard with the 8 screws.

Step 10. Attach the system fan to the new heat-sink and secure it with the screws.

Step 11. Reattach the base cover and secure it with the screws.

Replacing the speaker system

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the speaker system:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

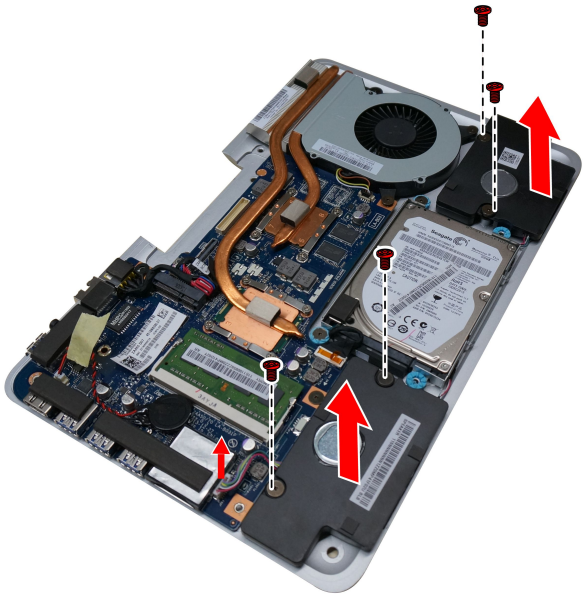
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Disconnect the speaker cable from the connectors on the motherboard.

Step 6. Remove the 4 screws that secure the speaker system to the motherboard.

Step 7. Detach the speaker from the chassis.



Step 8. To install the new speaker system:

a. Attach the new speaker cable to the chassis and secure it with the 4 screws.

b. Connect the new speaker cable to the motherboard.

Step 9. Reattach the base cover and secure it with the screws.

Replacing the motherboard

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the motherboard:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

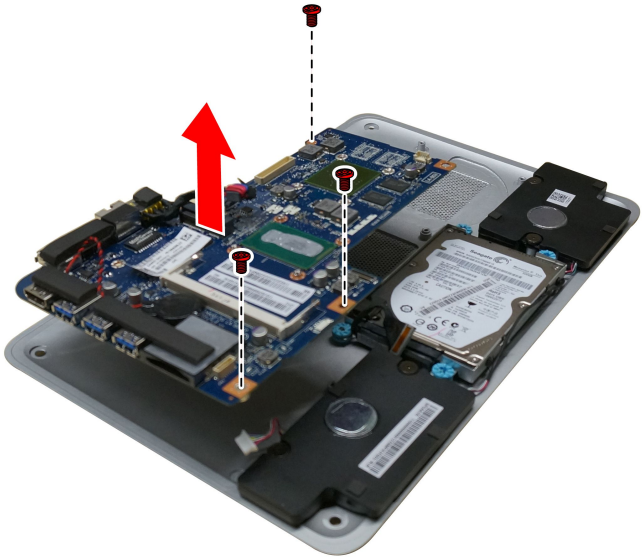
Step 5. Remove a memory module. Refer to “Replacing a memory module”.

Step 6. Remove the system fan. Refer to “Replacing the system fan”.

Step 7. Remove the heat-sink. Refer to “Replacing the heat-sink”.

Step 8. Remove all the cables connected to the motherboard.

Step 9. Remove the 3 screws that secure the motherboard to the chassis and slide it out as shown.



Step 10. To install the new motherboard:

a. Install the memory module to the connector on the new motherboard.

b. Line up the new motherboard with the chassis and slide it into position. Align the holes on the new motherboard with the mounting holes on the chassis and secure it to the chassis with the screws.

c. Connect all the cables to the new motherboard.

Step 11. Reattach the base cover and secure it with the screws.

Removing the hinge from the chassis

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To remove the hinge from the chassis

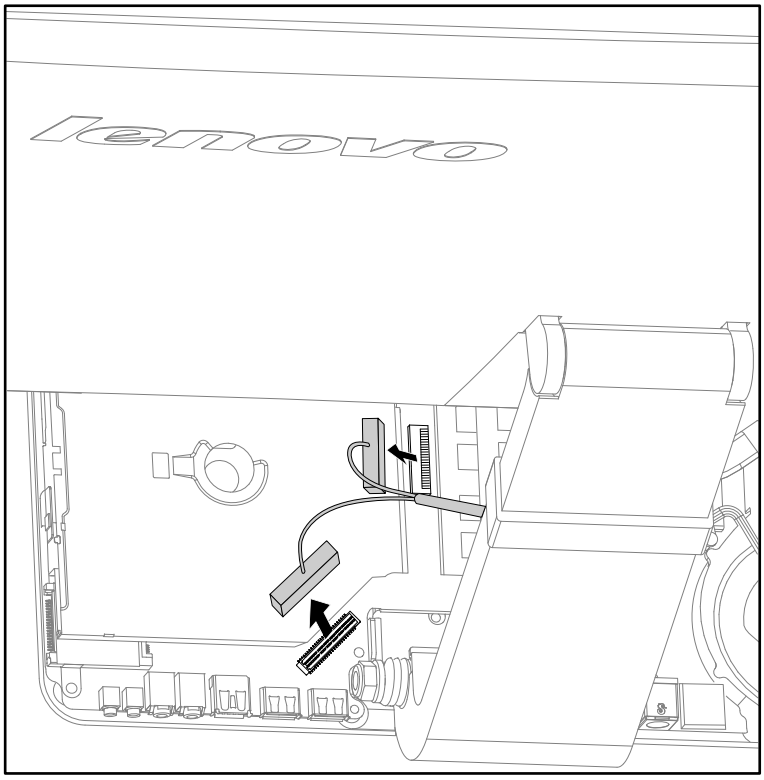
Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

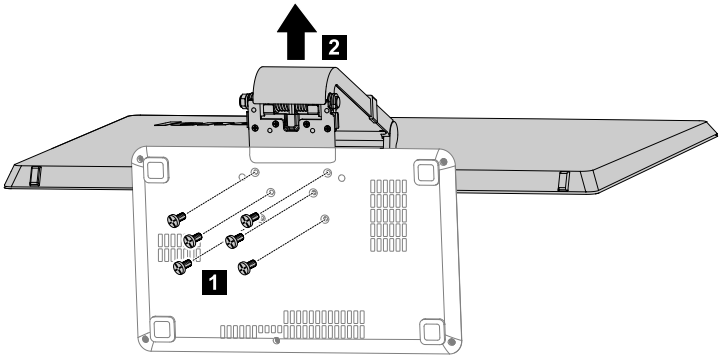
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Disconnect the touch and LED panel cables from the connectors on the motherboard.



Step 6. Remove the 6 screws that secure the hinge to the chassis **1** , then raise the hinge to remove it from the chassis. **2**



Step 7. To reattach the hinge to the chassis:

a. Line up the hinge with the chassis and slide the hinge into position.

b. Secure the hinge to the chassis with the 6 screws.

c. Reconnect the touch and LED panel cables to the motherboard.

Step 8. Reattach the base cover and secure it with the screws.

Removing the rear cover

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To remove the rear cover

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

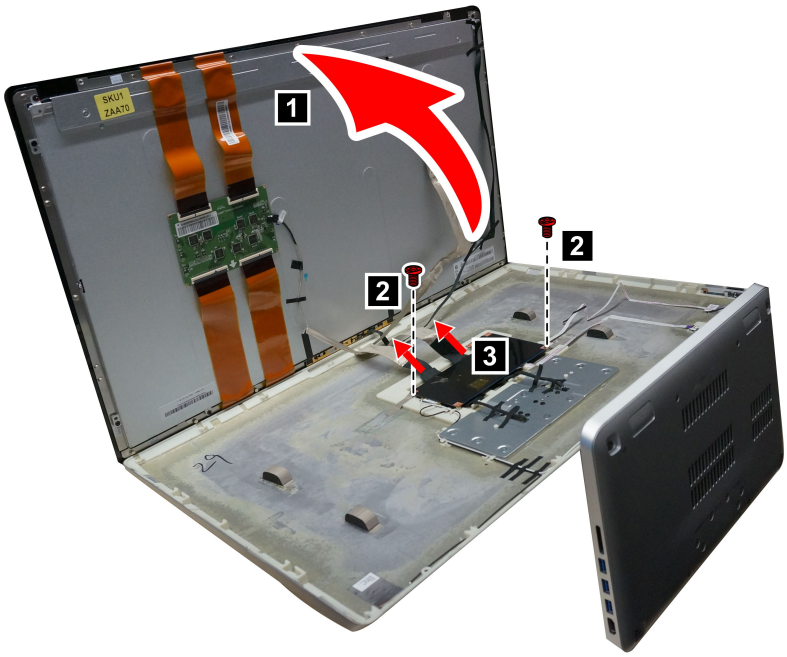
Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the 2 screws that secure the LED panel to the rear cover.

Step 7. Slide the LED panel upward from the bottom (with “Lenovo” logo) of the panel.

Step 8. Open up the LED panel from the bottom 1, remove the 2 screws that secure the transform board to the rear cover 2, and then disconnect the 2 cables from the transform board. 3



Step 9. Then separate the rear cover from the LED panel.

Step 10. To reattach the rear cover:

a. Line up the LED panel with the rear cover, reconnect the LVDS1 and LVDS2 cables to the transform board.

b. Reattach the transform board, and secure it to the rear cover with the 2 screws.

c. Line up the LED panel with mounting pins on the rear cover, and then slide it into position.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables back to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

Replacing the Transform board

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the transform board

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

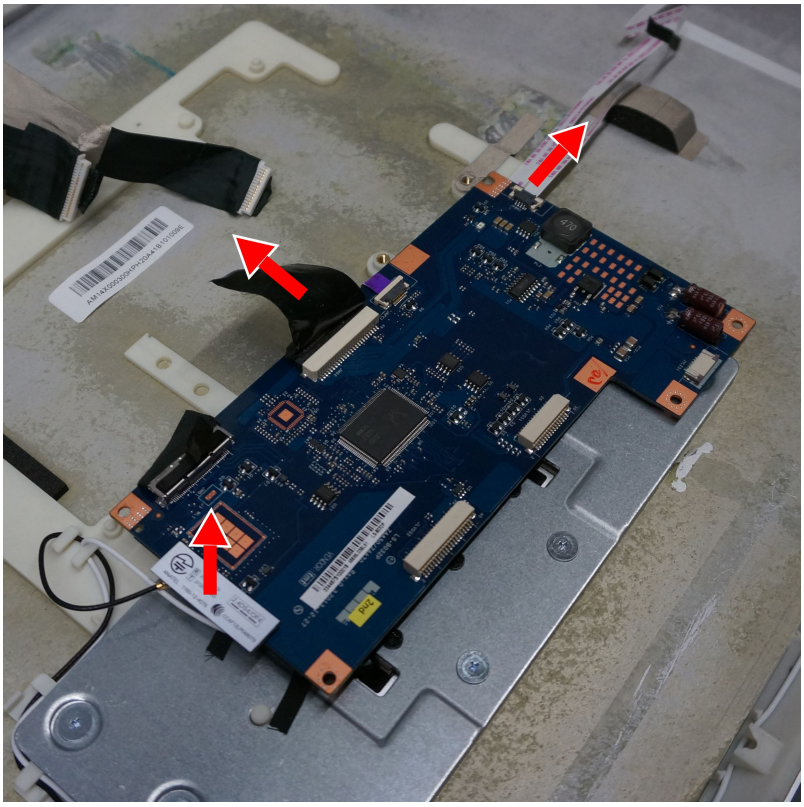
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Remove the 2 screws that secure the transform board to the rear cover, and then lift it up to remove it.



Step 8. Disconnect all the cables from the transform board.

Step 9. Lift up the Wi-Fi card to remove it from the transform board.

Step 10. To install the new transform board:

a. Install the Wi-Fi card to the new transform board.

b. Connect all the cables to the new transform board.

c. Secure the transform board to the rear cover with the screws.

Step 11. Reattach the rear cover to the LED panel.

Step 12. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables back to the motherboard.

Step 13. Reattach the base cover and secure it with the screws.

Replacing the Wi-Fi card

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the Wi-Fi card:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Lift up the Wi-Fi card to remove it from the socket.

Step 8. Disconnect the antenna cable and data cable from the Wi-Fi card.

Step 9. To install the new Wi-Fi card:

a. Connect the antenna cable to the new Wi-Fi card.

b. Line up the new Wi-Fi card with the socket, snap it into position and secure it with the pins.

Step 10. Reattach the rear cover to the LED panel.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

Replacing the power switch board

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the power switch board

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

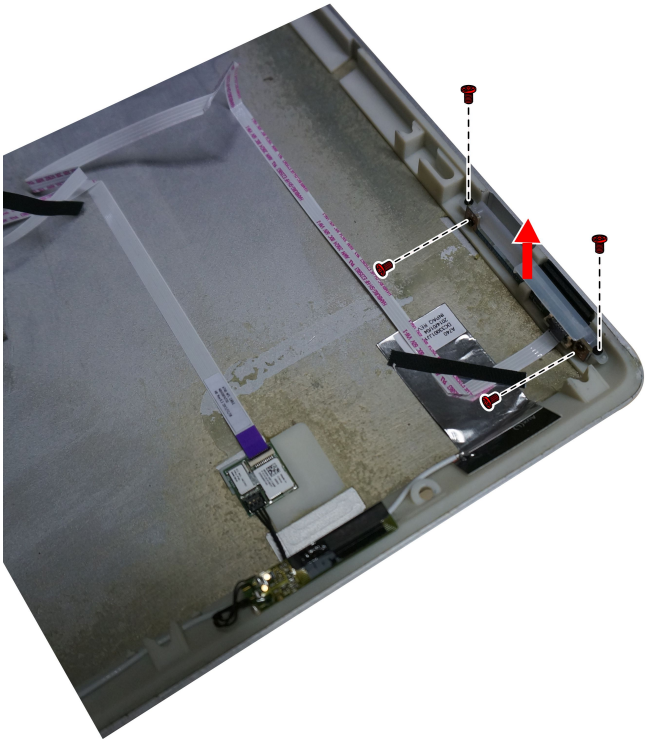
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Remove the 4 screws that secure the power switch board to the rear cover and then release the power switch board from the locking pin.



Step 8. Disconnect the power cable from the power switch board.

Step 9. To install the power switch board:

a. Connect the power cable to the new converter board.

b. Line up the hole on the new power switch board with the mounting hole on the rear cover and secure it with the screw.

Step 10. Reattach the rear cover to the LED panel.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

Replacing the NFC module

Attention: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the Bluetooth module:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

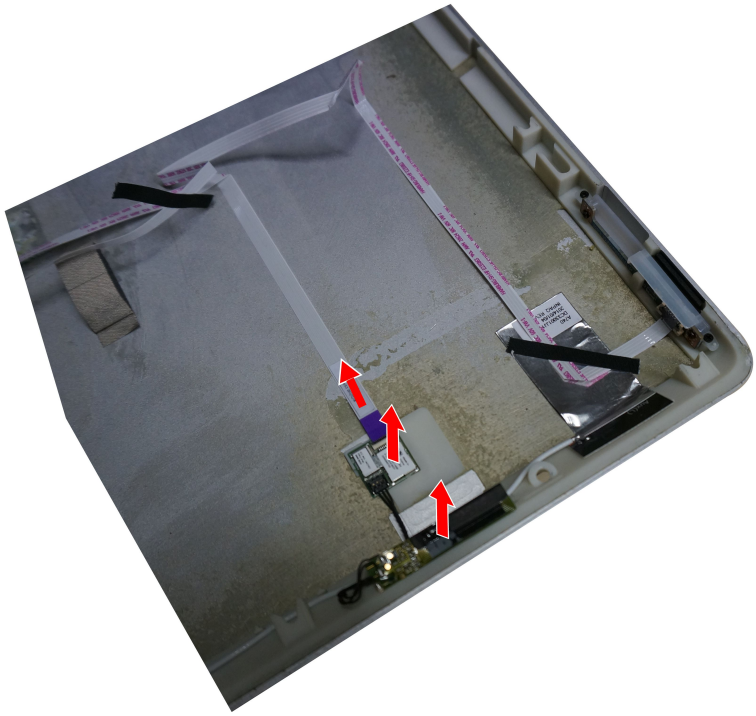
Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Disconnect the cable from the NFC module.



Step 8. The NFC module is glued to the rear cover, using a flat head screw driver gently to remove the module from the rear cover.

Step 9. To install the new NFC module:

a. Connect the cable to the new NFC module.

b. Line up the new NFC module with the socket, snap it into position.

Step 10. Reattach the rear cover to the LED panel.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

Replacing the camera

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

To replace the camera:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

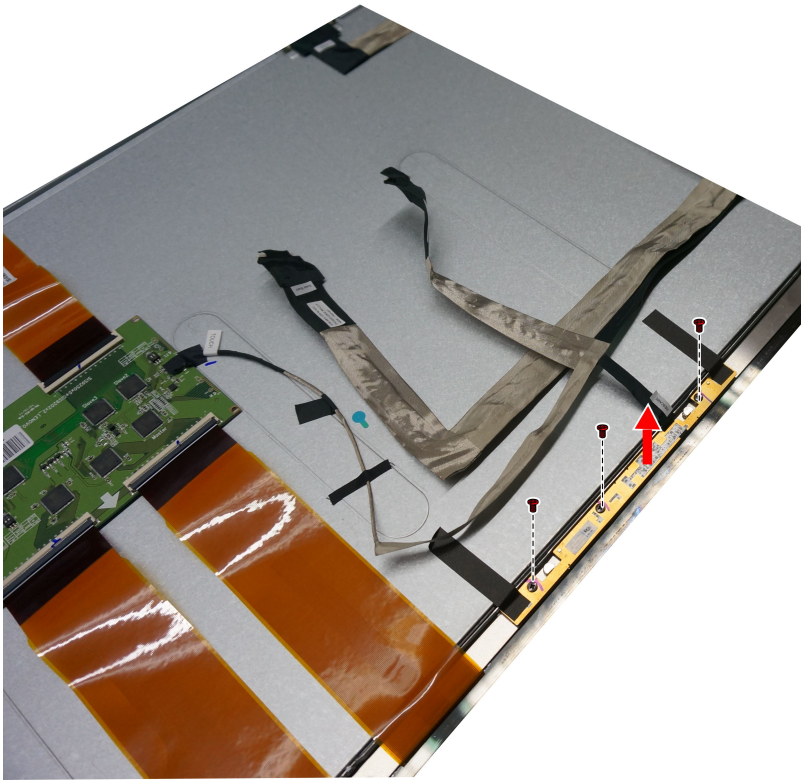
Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Remove the 3 screws that secure the camera to the front bezel.

Step 8. Lift up the camera and disconnect the data cable from the camera.



Step 9. To install the new camera:

a. Connect the data cable to the new camera.

b. Line up the holes in the new camera with the mounting holes on the LED panel and secure it with the 3 screws.

Step 10. Reattach the rear cover to the LED panel.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

Replacing the LED panel

Note: Turn off the computer and wait 3 to 5 minutes to let it cool down before removing the cover.

Note: It may be helpful to place the computer face-down on a soft flat surface for this procedure. Lenovo recommends that you use a blanket, towel, or other soft cloth to protect the computer screen from scratches or other damage.

To replace the LED panel:

Step 1. Remove any media (disks, CDs, DVDs, or memory cards) from the drives, shut down the operating system, and turn off the computer and all attached devices.

Step 2. Unplug all power cords from electrical outlets.

Step 3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. Refer to “Left and right view” and “Rear view” for help with locating the various connectors.

Step 4. Remove the base cover. Refer to “Removing the base cover”.

Step 5. Remove the hinge from the chassis. Refer to “Removing the hinge from the chassis”.

Step 6. Remove the rear cover. Refer to “Removing the rear cover”.

Step 7. Remove the camera. Refer to “Replacing the camera”.

Step 8. Remove the LVDS cable and the camera-touch-backlight cables from the LED panel.

Step 9. To install the new the LED panel:

a. Connect the LVDS cable and the camera-touch-backlight cables to the connector on the new LED panel.

b. Reattach the camera to the LED panel.

Step 10. Reattach the rear cover to the LED panel.

Step 11. Reattach the hinge to the chassis, and reconnect the touch and LED panel cables to the motherboard.

Step 12. Reattach the base cover and secure it with the screws.

A540 FRU lists

This chapter lists the information on the field replaceable units (FRUs) for A540 All-In-One computers.

Attention: Be sure to read and understand all the safety information before replacing any FRUs.

Notes: FRUs that have a 1 or 2 in the CRU column are Customer Replaceable Units (CRUs).

- **1**– identifies parts that are fairly simple to replace, requiring few or no tools.
- **2**– identifies parts that are slightly more difficult to replace.
- **N**-identifies parts that are not to be replaced by the customer.

FRUs		FRU Description	Service Part Number (FRU #)	CRU ID
Mainboard	Mainboard	C A540 NOK I3-4158 UMA W/O TV	5B20F62993	N
		C A540 NOK I5-4258 UMA W/O TV	5B20F62984	N
		C A540 NOK I7-4558 UMA W/O TV	5B20F62973	N
		C A540 NOK I3-4158 UMA W/TV	5B20F62977	N
		C A540 NOK I5-4258 UMA W/TV	5B20F62964	N
		C A540 NOK I7-4558 UMA W/TV	5B20F62990	N
		C A540 NOK I3-4158 DIS W/O TV	5B20F62981	N
		C A540 NOK I5-4258 DIS W/O TV	5B20F62970	N
		C A540 NOK I7-4558 DIS W/O TV	5B20F62997	N
		C A540 NOK I3-4158 DIS W/TV	5B20F62986	N
		C A540 NOK I5-4258 DIS W/TV	5B20F62975	N
		C A540 NOK I7-4558 DIS W/TV	5B20F62971	N
		C A540 W8S I3-4158 UMA W/O TV	5B20F62998	N
		C A540 W8S I5-4258 UMA W/O TV	5B20F62987	N
		C A540 W8S I7-4558 UMA W/O TV	5B20F62978	N
		C A540 W8S I3-4158 UMA W/TV	5B20F62965	N
		C A540 W8S I5-4258 UMA W/TV	5B20F62992	N
		C A540 W8S I7-4558 UMA W/TV	5B20F62983	N
		C A540 W8S I3-4158 DIS W/O TV	5B20F62972	N
		C A540 W8S I5-4258 DIS W/O TV	5B20F62999	N
		C A540 W8S I7-4558 DIS W/O TV	5B20F62988	N
		C A540 W8S I3-4158 DIS W/TV	5B20F62979	N
		C A540 W8S I5-4258 DIS W/TV	5B20F62966	N
		C A540 W8S I7-4558 DIS W/TV	5B20F62967	N
		C A540 W8P I3-4158 UMA W/O TV	5B20F62994	N
		C A540 W8P I5-4258 UMA W/O TV	5B20F62985	N
		C A540 W8P I7-4558 UMA W/O TV	5B20F62974	N

		C A540 W8P I3-4158 UMA W/TV	5B20F63000	N
		C A540 W8P I5-4258 UMA W/TV	5B20F62991	N
		C A540 W8P I7-4558 UMA W/TV	5B20F62980	N
		C A540 W8P I3-4158 DIS W/O TV	5B20F62969	N
		C A540 W8P I5-4258 DIS W/O TV	5B20F62996	N
		C A540 W8P I7-4558 DIS W/O TV	5B20F62976	N
		C A540 W8P I3-4158 DIS W/TV	5B20F62963	N
		C A540 W8P I5-4258 DIS W/TV	5B20F62989	N
		C A540 W8P I7-4558 DIS W/TV	5B20F62995	N
RAM	4G	M471B5173QH0-YK0 4GB D3L-1600S内存-HF	1100906	N
		HMT451S6AFR8A-PB	1100638	N
		MT8KTF51264HZ-1G6E1 4GB D3L-1600S内存-HF	1100957	N
		Mic_R D9QBJ 4GB D3L-1600S内存-HF	1100967	N
		Mic_S D9QBJ 4GB D3L-1600S内存	1100959	N
	8G	M471B1G73QH0-YK0 8GB D3L-1600S内存-HF	1100907	N
		HMT41GS6AFR8A-PB	1100634	N
		MT16KTF1G64HZ-1G6E1	1100635	N
		Mic_R D9QBJ 8GB D3L-1600S内存-HF	1101012	N
HDD	500G	WD5000LPVX-08V0T 6G 5.4K 500G 7mm HDD LI	16200379	N
		ST500LM012 6G 9.5mm 5.4K 500G HDD	16200387	N
		Seagate Yarra-1D 6G 7 5400 500	16200626	N
		Hitachi HTS545050A7E380 8M 5400RPM 500G HDD 7mm	16200067	N
		ST500LM012 BP 9.5mm 16M 5.4K 500G HDD	16200323	N
	1TB	WD10JPVX-08JC3 6G 9.5 4K 1T HDD LI	16200377	N
		HTS541010A9E680 6G 9.5 4K 1TB HDD LI	16200375	N
		ST1000LM024 BP 9.5mm 16M 5.4K 1T HDD	16200321	N
		ST1000LM024 6G 9.5mm 5.4K 1T HDD	16200385	N
SSHD	500G	ST500LM000 500G SSHD	16200420	N
	1TB	ST1000LM014 1TB SSHD	16200421	N
ODD		DB65 - Silver for DT Bundle	25014373	N
Adapter	120W	DELTA ADP-120ZB BBHT common 120W adapter	36200439	1
		Liteon PA-1121-04LB 120w common adapter	36200440	1
	150W	FSP150-RAB common 150W adapter	36200462	1
		Liteon PA-1151-11VB 150w common adapter	36200463	1

WIFI_Bluetooth	802.11AC_BT4.0	RTL8821AU-CG 1x1ac+BT4.0 Combo USB	11202701	N
	802.11AC_BT4.0	RTL8821AU-CG 1x1ac+BT4.0 Combo USB	11202701	N
	802.11BGN_BT4.0	RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
Remoter	Remoter	Philips Win8 IRWhite Controller	888900017	N
		Philips IR receiver	888900019	N
		Philips Win7 IR receiver(R)	888010662	N
TV tuner	DVB-T	Avermedia H334 DVB-T Mini TV Card	11201071	N
	ATSC	Avermedia H334 ATSC Mini TV Card	11201072	N
Power Cord	Power Cord	LW BLK1.8m UL CSA Power Cord(R)	31026357	1
		VL BLK1.8m UL CSA Power Cord®	31026145	1
		立讯(博硕)1.8米 C13 美制电源线	31049521	1
		LW BLK1.8m ANE Power Cord®	31026350	1
		VL BLK1.8m ANE Power Cord®	31026140	1
		立讯(博硕)1.8米 C13 澳制电源线	31049524	1
		LW 1.8m JAPAN Power Cord®	31039730	1
		豪利士1.8米C13日制电源线	31049514	1
		立讯(博硕)1.8米 C13 日制电源线	31049523	1
		冠旭黑色单头1.8mCCC电源线(R)	31028776	1
		LX(ASAP) 1.8M CCC C13 power cord®	31040179	1
		LW BLK1.8m BS Power Cord®	31026096	1
		VL BLK1.8m BS Power Cord(R)	31026082	1
		立讯(博硕)1.8米 C13 英制电源线	31502861	1
		LW BLK1.8m VDE Power Cord®	31026355	1
		VL BLK1.8m VDE Power Cord®	31026144	1
		立讯(博硕)1.8米 C13 欧制电源线	31049522	1
		良维黑色单头1.8m印度电源线®	31033216	1
		立讯(博硕)1.8米 C13 印度电源线	31502871	1
		LW BLK1.8m BSMI Power Cord®	31026349	1
		VL BLK1.8m BSMI Power Cord®	31026146	1
		立讯(博硕)1.8米 C13 台制电源线	31502867	1
		LW BLK1.8m SABS Power Cord®	31031394	1
		豪利士1.8米C13南非制电源线	31049509	1
		立讯(博硕)1.8米 C13 南非制电源线	31502865	1

		良维黑色单头1.8m C13 IRAM电源线®	31036980	1
		豪利士1.8米C13拉美制电源线	31049515	1
		立讯(博硕)1.8米 C13 拉美制电源线	31502869	1
		良维黑色单头1.8m C13 Brazil电源线®	31038784	1
		豪利士1.8米C13巴西制电源线	31049513	1
		立讯(博硕)1.8米 C13 巴西电源线	31502862	1
		良维黑色单头1.8m C13 Korea电源线®	31026351	1
		VL BLK1.8m KTL Power Cord®	31026143	1
		立讯(博硕)1.8米 C13 韩制电源线	31502870	1
		Longwell 1.8M Italy C13 power cord®	31039726	1
		豪利士1.8米C13意制电源线	31049512	1
		立讯(博硕)1.8米 C13 意大利电源线	31502864	1
		Longwell 1.8M Denmark C13 power cord®	31039729	1
		豪利士1.8米C13丹麦制电源线	31049511	1
		立讯(博硕)1.8米 C13 丹麦制电源线	31502863	1
		Longwell 1.8M SEV C13 power cord®	31039732	1
		豪利士1.8米C13瑞士制电源线	31049516	1
		立讯(博硕)1.8米 C13 瑞士制电源线	31502868	1
		Longwell 1.8M Israel C13 power cord®	31039728	1
		豪利士1.8米C13以色列制电源线	31049510	1
		立讯(博硕)1.8米 C13 以色列制电源线	31502866	1
KB&Mouse	KB&Mouse	Liteon SK-8861(US) 2.4G KB-Metal8	25216020	2
		Liteon SK-8861(TW) 2.4G KB-Metal8	25216021	2
		Liteon SK-8861(TH) 2.4G KB-Metal8	25216022	2
		Liteon SK-8861(CS-SK) 2.4G KB-Metal8	25216023	2
		Liteon SK-8861(US-IN) 2.4G KB-Metal8	25216024	2
		Liteon SK-8861(RU) 2.4G KB-Metal8	25216025	2
		Liteon SK-8861(GB) 2.4G KB-Metal8	25216026	2
		Liteon SK-8861(Nordic) 2.4G KB-Metal8	25216027	2
		Liteon SK-8861(LA) 2.4G KB-Metal8	25216028	2
		Liteon SK-8861(SA) 2.4G KB-Metal8	25216030	2
		Liteon SK-8861(DE) 2.4G KB-Metal8	25216031	2
		Liteon SK-8861(TR) 2.4G KB-Metal8	25216032	2
		Liteon SK-8861(ES) 2.4G KB-Metal8	25216033	2
		Liteon SK-8861(IT) 2.4G KB-Metal8	25216034	2
		Liteon SK-8861(FR) 2.4G KB-Metal8	25216035	2
		Liteon SK-8861(KR) 2.4G KB-Metal8	25216036	2
		Liteon SK-8861(JP) 2.4G KB-Metal8	25216037	2
		Liteon SK-8861(EN-FR) 2.4G KB-Metal8	25216038	2

		Liteon SK-8861(BE-EN) 2.4G KB-Metal8	25216039	2
		Liteon SK-8861(US-EU) 2.4G KB-Metal8	25216040	2
		Liteon SK-8861(CH) 2.4G KB-Metal8	SD50F65816	2
		Liteon ZTM600 2.4G Mouse (WW) Silver	25216043	2
		Liteon SM-8861 Mouse(WW) improved silver	25216250	2
		LTO SM-8861 MC(No BTY) improved silver	25216336	2
DISPLAY	DISPLAY	Module,C,A540,23.8,TS,FHD LG	5D10F62982	N
COVER	COVER	Rear,C,A540,W/LOGO	5CB0F63308	N
N/A	N/A	A540 Speaker	90205401	N
HINGE	HINGE	C,A540	5H50F63290	N
COVER	COVER	Upper,C,A540,W/TV	5CB0F63293	N
COVER	COVER	Upper,C,A540,W/O TV	5CB0F63300	N
COVER	COVER	Upper,C,A540,W/O TV W/O HDMI_IN	5CB0F63311	N
COVER	COVER	Lower,C,A540	5CB0F63305	N
FOOT	FOOT	Rubber,C,A540	5F40F63301	N
BRACKET	BRACKET	HDD,C,A540,L+R	5B40F63303	N
CABLE	CABLE	HDD SATA,C,A540	5C10F63009	N
FOOT	FOOT	Panel,C,A540	5F40F63299	N
BRACKET	BRACKET	DC-IN,C,A540	5B40F63297	N
CABLE	CABLE	DC-IN,C,A540	5C10F63295	N
N/A	N/A	A540 Taisol Thermal DIS W/Gasket*2	90205300	N
N/A	N/A	A540 Coolermaster Thermal DIS W/Gasket*2	90205301	N
N/A	N/A	A540 Taisol Thermal UMA W/Gasket*2	90205302	N
N/A	N/A	A540 Coolermaster Thermal UMA W/Gasket*2	90205303	N
N/A	N/A	A540 Delta Fan	90205304	N
N/A	N/A	A540 Sunon Fan	90205305	N
BRACKET	BRACKET	LCD,C,A540	5B40F63291	N
MECHANICAL	MECHANICAL	Power Board Bracket ,C,A540	5M20F63298	N
CABLE	CABLE	LVDS,C,A540 LG	5C10F63307	N
CABLE	CABLE	TV Scalar BD,C,A540,3IN1	5C10F63294	N
CABLE	CABLE	Power BD,C,A540	5C10F63292	N
CARDPOP	CARDPOP	Power BD,C,A540,W/O cable	5C50F63304	N
CABLE	CABLE	NFC,C,A540	5C10F63310	N
CARDPOP	CARDPOP	TV Scalar BD,C,A540,W/O cable	5C50F63296	N
ANTENNA	ANTENNA	WLAN,C,A540,Main+AUX	5A30F63288	N
CONNECTOR	CONNECTOR	TV JACK,C,A540,F	5CA0F63309	N
CONNECTOR	CONNECTOR	TV JACK,C,A540,P	5CA0F63289	N

A740 FRU lists

This chapter lists the information on the field replaceable units (FRUs) for A540 All-In-One computers.

Attention: Be sure to read and understand all the safety information before replacing any FRUs.

Notes: FRUs that have a 1 or 2 in the CRU column are Customer Replaceable Units (CRUs).

- **1**– identifies parts that are fairly simple to replace, requiring few or no tools.
- **2**– identifies parts that are slightly more difficult to replace.
- **N**-identifies parts that are not to be replaced by the customer.

FRUs		FRU Description	Service Part Number (FRU #)	CRU ID
Mainboard	BDPLANAR	C,A540,NOK,I3-4158, DIS,W/O TV	5B20F62981	N
	BDPLANAR	C,A540,NOK,I5-4258, DIS,W/O TV	5B20F62970	N
	BDPLANAR	C,A540,NOK,I7-4558, DIS,W/O TV	5B20F62997	N
	BDPLANAR	C,A540,NOK,I3-4158, DIS,W/TV	5B20F62986	N
	BDPLANAR	C,A540,NOK,I5-4258, DIS,W/TV	5B20F62975	N
	BDPLANAR	C,A540,NOK,I7-4558, DIS,W/TV	5B20F62971	N
	BDPLANAR	C,A540,W8S,I3-4158, DIS,W/O TV	5B20F62972	N
	BDPLANAR	C,A540,W8S,I5-4258, DIS,W/O TV	5B20F62999	N
	BDPLANAR	C,A540,W8S,I7-4558, DIS,W/O TV	5B20F62988	N
	BDPLANAR	C,A540,W8S,I3-4158, DIS,W/TV	5B20F62979	N
	BDPLANAR	C,A540,W8S,I5-4258, DIS,W/TV	5B20F62966	N
	BDPLANAR	C,A540,W8S,I7-4558, DIS,W/TV	5B20F62967	N
	BDPLANAR	C,A540,W8P,I3-4158, DIS,W/O TV	5B20F62969	N
	BDPLANAR	C,A540,W8P,I5-4258, DIS,W/O TV	5B20F62996	N
	BDPLANAR	C,A540,W8P,I7-4558, DIS,W/O TV	5B20F62976	N
	BDPLANAR	C,A540,W8P,I3-4158, DIS,W/TV	5B20F62963	N
	BDPLANAR	C,A540,W8P,I5-4258, DIS,W/TV	5B20F62989	N
	BDPLANAR	C,A540,W8P,I7-4558, DIS,W/TV	5B20F62995	N
	BDPLANAR	C A740 NOK I3-4158 DIS Q W/O TV	5B20F65651	N
	BDPLANAR	C A740 NOK I5-4258 DIS Q W/O TV	5B20F65677	N
	BDPLANAR	C A740 NOK I7-4558 DIS Q W/O TV	5B20F65669	N
	BDPLANAR	C A740 NOK I3-4158 DIS Q W/TV	5B20F65662	N
	BDPLANAR	C A740 NOK I5-4258 DIS Q W/TV	5B20F65656	N
	BDPLANAR	C A740 NOK I7-4558 DIS Q W/TV	5B20F65648	N
	BDPLANAR	C A740 W8S I3-4158 DIS Q W/O TV	5B20F65672	N
	BDPLANAR	C A740 W8S I5-4258 DIS Q W/O TV	5B20F65666	N
	BDPLANAR	C A740 W8S I7-4558 DIS Q W/O TV	5B20F65664	N
	BDPLANAR	C A740 W8S I3-4158 DIS Q W/TV	5B20F65658	N
	BDPLANAR	C A740 W8S I5-4258 DIS Q W/TV	5B20F65650	N
	BDPLANAR	C A740 W8S I7-4558 DIS Q W/TV	5B20F65676	N
	BDPLANAR	C A740 W8P I3-4158 DIS Q W/O TV	5B20F65657	N
	BDPLANAR	C A740 W8P I5-4258 DIS Q W/O TV	5B20F65649	N

	BDPLANAR	C A740 W8P I7-4558 DIS Q W/O TV	5B20F65674	N
	BDPLANAR	C A740 W8P I3-4158 DIS Q W/TV	5B20F65667	N
	BDPLANAR	C A740 W8P I5-4258 DIS Q W/TV	5B20F65660	N
	BDPLANAR	C A740 W8P I7-4558 DIS Q W/TV	5B20F65655	N
RAM	4G	M471B5173QH0-YK0 4GB D3L-1600S内存-HF	1100906	N
		HMT451S6AFR8A-PB	1100638	N
		MT8KTF51264HZ-1G6E1 4GB D3L-1600S内存-HF	1100957	N
		Mic_R D9QBJ 4GB D3L-1600S内存-HF	1100967	N
		Mic_S D9QBJ 4GB D3L-1600S内存	1100959	N
	8G	M471B1G73QH0-YK0 8GB D3L-1600S内存-HF	1100907	N
		HMT41GS6AFR8A-PB	1100634	N
		MT16KTF1G64HZ-1G6E1	1100635	N
		Mic_R D9QBJ 8GB D3L-1600S内存-HF	1101012	N
HDD	500G	WD5000LPVX-08V0T 6G 5.4K 500G 7mm HDD LI	16200379	N
		ST500LM012 6G 9.5mm 5.4K 500G HDD	16200387	N
		Seagate Yarra-1D 6G 7 5400 500	16200626	N
		Hitachi HTS545050A7E380 8M 5400RPM 500G HDD 7mm	16200067	N
		ST500LM012 BP 9.5mm 16M 5.4K 500G HDD	16200323	N
	1TB	WD10JPVX-08JC3 6G 9.5 4K 1T HDD LI	16200377	N
		HTS541010A9E680 6G 9.5 4K 1TB HDD LI	16200375	N
		ST1000LM024 BP 9.5mm 16M 5.4K 1T HDD	16200321	N
		ST1000LM024 6G 9.5mm 5.4K 1T HDD	16200385	N
SSHD	500G	ST500LM000 500G SSHD	16200420	N
	1TB	ST1000LM014 1TB SSHD	16200421	N
ODD		DB65 - Silver for DT Bundle	25014373	N
Adapter	Adapter	FSP150-RAB common 150W adapter	36200462	1
		Liteon PA-1151-11VB 150w common adapter	36200463	1
WIFI_Bluetooth	802.11AC_BT4.0	RTL8821AU-CG 1x1ac+BT4.0 Combo USB	11202701	N
	802.11AC_BT4.0	RTL8821AU-CG 1x1ac+BT4.0 Combo USB	11202701	N
	802.11BGN_BT4.0	RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N
		RTL8723AS-VAU 1x1bgn BT4.0 Combo USB	20200052	N

Remoter	Remoter	Philips Win8 IRWhite Controller	888900017	N
		Philips IR receiver	888900019	N
		Philips Win7 IR receiver(R)	888010662	N
TV tuner	DVB-T	Avermedia H334 DVB-T Mini TV Card	11201071	N
	ATSC	Avermedia H334 ATSC Mini TV Card	11201072	1
Power Cord	Power Cord	LW BLK1.8m UL CSA Power Cord(R)	31026357	1
		VL BLK1.8m UL CSA Power Cord®	31026145	1
		立讯(博硕)1.8米 C13 美制电源线	31049521	1
		LW BLK1.8m ANE Power Cord®	31026350	1
		VL BLK1.8m ANE Power Cord®	31026140	1
		立讯(博硕)1.8米 C13 澳制电源线	31049524	1
		LW 1.8m JAPAN Power Cord®	31039730	1
		豪利士1.8米C13日制电源线	31049514	1
		立讯(博硕)1.8米 C13 日制电源线	31049523	1
		冠旭黑色单头1.8mCCC电源线(R)	31028776	1
		LX(ASAP) 1.8M CCC C13 power cord®	31040179	1
		LW BLK1.8m BS Power Cord®	31026096	1
		VL BLK1.8m BS Power Cord(R)	31026082	1
		立讯(博硕)1.8米 C13 英制电源线	31502861	1
		LW BLK1.8m VDE Power Cord®	31026355	1
		VL BLK1.8m VDE Power Cord®	31026144	1
		立讯(博硕)1.8米 C13 欧制电源线	31049522	1
		良维黑色单头1.8m印度电源线®	31033216	1
		立讯(博硕)1.8米 C13 印度电源线	31502871	1
		LW BLK1.8m BSMI Power Cord®	31026349	1
		VL BLK1.8m BSMI Power Cord®	31026146	1
		立讯(博硕)1.8米 C13 台制电源线	31502867	1
		LW BLK1.8m SABS Power Cord®	31031394	1
		豪利士1.8米C13南非制电源线	31049509	1
		立讯(博硕)1.8米 C13 南非制电源线	31502865	1
		良维黑色单头1.8m C13 IRAM电源线®	31036980	1
		豪利士1.8米C13拉美制电源线	31049515	1
		立讯(博硕)1.8米 C13 拉美制电源线	31502869	1
		良维黑色单头1.8m C13 Brazil电源线®	31038784	1
		豪利士1.8米C13巴西制电源线	31049513	1
		立讯(博硕)1.8米 C13 巴西电源线	31502862	1
		良维黑色单头1.8m C13 Korea电源线®	31026351	1
		VL BLK1.8m KTL Power Cord®	31026143	1

		立讯(博硕)1.8米 C13 韩制电源线	31502870	1
		Longwell 1.8M Italy C13 power cord®	31039726	1
		豪利士1.8米C13意制电源线	31049512	1
		立讯(博硕)1.8米 C13 意大利电源线	31502864	1
		Longwell 1.8M Denmark C13 power cord®	31039729	1
		豪利士1.8米C13丹麦制电源线	31049511	1
		立讯(博硕)1.8米 C13 丹麦制电源线	31502863	1
		Longwell 1.8M SEV C13 power cord®	31039732	1
		豪利士1.8米C13瑞士制电源线	31049516	1
		立讯(博硕)1.8米 C13 瑞士制电源线	31502868	1
		Longwell 1.8M Israel C13 power cord®	31039728	1
		豪利士1.8米C13以色列制电源线	31049510	1
		立讯(博硕)1.8米 C13 以色列制电源线	31502866	1
KB&Mouse	KB&Mouse	Liteon SK-8861(US) 2.4G KB-Metal8	25216020	2
		Liteon SK-8861(TW) 2.4G KB-Metal8	25216021	2
		Liteon SK-8861(TH) 2.4G KB-Metal8	25216022	2
		Liteon SK-8861(CS-SK) 2.4G KB-Metal8	25216023	2
		Liteon SK-8861(US-IN) 2.4G KB-Metal8	25216024	2
		Liteon SK-8861(RU) 2.4G KB-Metal8	25216025	2
		Liteon SK-8861(GB) 2.4G KB-Metal8	25216026	2
		Liteon SK-8861(Nordic) 2.4G KB-Metal8	25216027	2
		Liteon SK-8861(LA) 2.4G KB-Metal8	25216028	2
		Liteon SK-8861(SA) 2.4G KB-Metal8	25216030	2
		Liteon SK-8861(DE) 2.4G KB-Metal8	25216031	2
		Liteon SK-8861(TR) 2.4G KB-Metal8	25216032	2
		Liteon SK-8861(ES) 2.4G KB-Metal8	25216033	2
		Liteon SK-8861(IT) 2.4G KB-Metal8	25216034	2
		Liteon SK-8861(FR) 2.4G KB-Metal8	25216035	2
		Liteon SK-8861(KR) 2.4G KB-Metal8	25216036	2
		Liteon SK-8861(JP) 2.4G KB-Metal8	25216037	2
		Liteon SK-8861(EN-FR) 2.4G KB-Metal8	25216038	2
		Liteon SK-8861(BE-EN) 2.4G KB-Metal8	25216039	2
		Liteon SK-8861(US-EU) 2.4G KB-Metal8	25216040	2
		Liteon SK-8861(CH) 2.4G KB-Metal8	SD50F65816	2
		Liteon ZTM600 2.4G Mouse (WW) Silver	25216043	2
		Liteon SM-8861 Mouse(WW) improved silver	25216250	2
		LTO SM-8861 MC(No BTY) improved silver	25216336	2
	DISPLAY	Module C A740 27 TS FHD AUO	5D10F65678	N
	DISPLAY	Module C A740 27 TS QHD SAM	5D10F65670	N

	COVER	Rear C A740 W/LOGO	5CB0F65661	N
	Speaker	A540 Speaker	90205401	N
	HINGE	C A740	5H50F65671	N
	COVER	Upper,C,A540,W/TV	5CB0F63293	N
	COVER	Upper,C,A540,W/O TV	5CB0F63300	N
	COVER	Upper,C,A540,W/O TV W/O HDMI_IN	5CB0F63311	N
	COVER	Lower,C,A540	5CB0F63305	N
	FOOT	Rubber,C,A540	5F40F63301	N
	BRACKET	HDD,C,A540,L+R	5B40F63303	N
	CABLE	HDD SATA,C,A540	5C10F63009	N
	FOOT	Panel,C,A540	5F40F63299	N
	BRACKET	DC-IN,C,A540	5B40F63297	N
	CABLE	DC-IN,C,A540	5C10F63295	N
Thermal	Thermal	A540 Taisol Thermal DIS W/Gasket*2	90205300	N
		A540 Coolermaster Thermal DIS W/Gasket*2	90205301	N
		A540 Taisol Thermal UMA W/Gasket*2	90205302	N
		A540 Coolermaster Thermal UMA W/Gasket*2	90205303	N
		A740 Taisol Thermal DIS W/Gasket*3	90205306	N
		A740 Coolermaster Thermal DIS W/Gasket*3	90205307	N
Fan	Fan	A540 Delta Fan	90205304	N
		A540 Sunon Fan	90205305	N
MECHANICAL	MECHANICAL	Power Board Bracket ,C,A540	5M20F63298	N
CABLE	CABLE	LVDS C A740 AUO	5C10F65663	N
CABLE	CABLE	LVDS C A740 SAM	5C10F65653	N
CABLE	CABLE	TV Scalar BD C A740 3IN1 AUO	5C10F65675	N
CABLE	CABLE	TV Scalar BD C A740 3IN1 SAM	5C10F65665	N
CABLE	CABLE	Power BD C A740	5C10F65654	N
CARDPOP	CARDPOP	Power BD,C,A540,W/O cable	5C50F63304	N
CABLE	CABLE	NFC C A740	5C10F65668	N
CARDPOP	CARDPOP	TV Scalar BD C A740 FHD	5C50F65659	N
CARDPOP	CARDPOP	TV Scalar BD C A740 QHD	5C50F65652	N
ANTENNA	ANTENNA	WLAN C A740 Main+AUX	5A30F65673	N
CONNECTOR	CONNECTOR	TV JACK,C,A540,F	5CA0F63309	N
CONNECTOR	CONNECTOR	TV JACK,C,A540,P	5CA0F63289	N

Chapter 8. General information

This chapter provides general information that applies to all computer models covered by this manual.

Additional Service Information

This chapter provides additional information that the service representative might find helpful.

Power management

Power management reduces the power consumption of certain components of the computer such as the system power supply, processor, hard disk drives, and some monitors.

Advanced configuration and power interface (ACPI) BIOS

As this computer has an ACPI BIOS system, the operating system is allowed to control the power management features of the computer and the settings for Advanced Power Management (APM) BIOS mode is ignored. Not all operating systems support ACPI BIOS mode.

Automatic Power-On features

The Automatic Power-On features within the Power Management menu allow you to enable and disable features that turn on the computer automatically.

- Wake Up on Alarm: You can specify a date and time at which the computer will be turned on automatically. This can be either a single event , a daily event or a weekly event.
- Wake Up on LAN: This feature allows LAN adapter card to wake the System.

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